



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/584,423	06/22/2006	Yasuhito Yaji	01381/10	1253
26646	7590	10/11/2007		
KENYON & KENYON LLP ONE BROADWAY NEW YORK, NY 10004			EXAMINER SHECHTMAN, SEAN P	
			ART UNIT	PAPER NUMBER
			2125	
			NOTIFICATION DATE	DELIVERY MODE
			10/11/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

uspto@kenyon.com

Office Action Summary

Application No.

10/584,423

Applicant(s)

YAJI ET AL.

Examiner

Sean P. Shechtman

Art Unit

2125

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 September 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-46 is/are pending in the application.
- 4a) Of the above claim(s) 2-29,31,32 and 35-46 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,30,33 and 34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/22/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1, 30, 33, 34 are presented for examination. Claims 2-18, 31, 32, 35-46 have been withdrawn from consideration.

Election/Restrictions

2. Claims 2-29, 31, 32, 35-46 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 9/17/07.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

4. The abstract of the disclosure is objected to because referring to line 6, "crated" should be "created". Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claim 1 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Although the claim is directed to a device comprising various elements, all of the elements could reasonably be interpreted by one of ordinary skill in the art, in light of the instant specification (page 104, line 11 – page 105, line 27; pages 124-126), to be software, such that the device comprising various elements is software, per se. Computer programs

Art Unit: 2125

claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program’s functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

6. Claim 33 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs, are not physical “things.” They are neither computer components nor statutory processes, as they are not “acts” being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program’s functionality to be realized. In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program’s functionality to be realized, and is thus statutory. See Lowry, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claim Rejections - 35 USC § 102

Art Unit: 2125

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 30, 33, 34 are rejected under 35 U.S.C. 102(b) as being anticipated by J.P. Pub. No. 2002-229635 to Kobayashi (hereinafter referred to as Kobayashi), supplied by applicant.

Referring to claims 1, 30, 33, 34, Kobayashi teaches a production schedule creation device, method, computer program, computer-readable medium recording a computer program, comprising: a production simulator that simulates a production process expressing a production state and a production constraint of the production process; a mathematical expression model holding device that holds a mathematical expression model which is created by acquiring information relating to creation of a production schedule to which attention is paid, and is a mathematical expression model expressing the production state and the production constraint of the above described production process in a mathematical expression; and an optimization calculation device that performs optimization calculation processing by using a predetermined evaluation function for the above described mathematical expression model, and calculates a production instruction for said production simulator, wherein the production instruction obtained by said optimization calculation device is supplied to said production simulator to cause it to execute simulation, an instruction to perform optimization calculation is output to said optimization calculation device from said production simulator whenever a new event occurs, and thereby said production simulator and said optimization calculation device are linked to each

Art Unit: 2125

other to create the production schedule in the above described production process (See claims of Kobayashi and international search report supplied by applicant).

8. Claims 1, 30, 33, 34 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 5,216,593 to Dietrich et al (hereinafter referred to as Dietrich).

Referring to claims 1, 30, 33, 34, Dietrich teaches a production schedule creation device, method, computer program, computer-readable medium recording a computer program (Col. 6, lines 40-63), comprising:

a production simulator that simulates a production process expressing a production state and a production constraint of the production process (Col. 19, lines 28-35);

a mathematical expression model holding device that holds a mathematical expression model which is created by acquiring information relating to creation of a production schedule to which attention is paid, and is a mathematical expression model expressing the production state and the production constraint of the above described production process in a mathematical expression (Col. 19, lines 25-38; Col. 7, line 67 – Col. 8, line 55); and

an optimization calculation device that performs optimization calculation processing by using a predetermined evaluation function for the above described mathematical expression model, and calculates a production instruction for said production simulator (Col. 19, lines 45-56),

wherein the production instruction obtained by said optimization calculation device is supplied to said production simulator to cause it to execute simulation, an instruction to perform optimization calculation is output to said optimization calculation device from said production

Art Unit: 2125

simulator whenever a new event occurs (Col. 20, lines 55 – Col. 21, line 12), and thereby said production simulator and said optimization calculation device are linked to each other to create the production schedule in the above described production process (Col. 4, lines 57- 68).

9. Claims 1, 30, 33, 34 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,606,527 to de Andrade Jr. et al (hereinafter referred to as Andrade).

Referring to claims 1, 30, 33, 34, Andrade teaches a production schedule creation device, method, computer program, computer-readable medium recording a computer program (Col. 2, lines 61 – Col. 3, line 27; Col. 4, lines 31 – Col. 5, line 3), comprising:

a production simulator that simulates a production process expressing a production state and a production constraint of the production process (Fig. 7, model generator, Col. 6, line 65 – Col. 7, line 9);

a mathematical expression model holding device that holds a mathematical expression model which is created by acquiring information relating to creation of a production schedule to which attention is paid, and is a mathematical expression model expressing the production state and the production constraint of the above described production process in a mathematical expression (Fig. 7, model generator, Col. 6, line 65 – Col. 7, line 9); and

an optimization calculation device that performs optimization calculation processing by using a predetermined evaluation function for the above described mathematical expression model, and calculates a production instruction for said production simulator (Fig. 7, optimizer, Col. 7, lines 10-16),

wherein the production instruction obtained by said optimization calculation device is supplied to said production simulator to cause it to execute simulation (Fig. 7, feedback; Col. 7, lines 17-22), an instruction to perform optimization calculation is output to said optimization calculation device from said production simulator whenever a new event occurs (See Fig. 7; Col. 7, lines 10-16), and thereby said production simulator and said optimization calculation device are linked to each other to create the production schedule in the above described production process (Fig. 7, Col. 2, lines 19-20).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean P. Shechtman whose telephone number is (571) 272-3754. The examiner can normally be reached on 9:30am-6:00pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo P. Picard can be reached on (571) 272-3749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/584,423

Page 8

Art Unit: 2125

SPS

Sean P. Shechtman



September 27, 2007

9/27/07